



700 West Liberty Street | Louisville, KY 40203-1911
Phone: 502.540.6000 | LouisvilleMSD.org

February 21, 2018

Cheryl Edwards
Permit Support Section
Surface Water Permits Branch
Division of Water
200 Fair Oaks Lane 4th Floor
Frankfort, KY 40601

Re: Morris Forman Water Quality Treatment Center
KPDES Permit No. KY0022411

Dear Ms. Edwards:

In accordance with the provisions of the KPDES Permit referenced above, the monthly Discharge Monitoring Report (DMR) and monthly Discharge (overflow) Reports for the reporting period January 1st to January 31st, 2018 are provided through NetDMR. The Morris Forman Water Quality Treatment Center (MFWQTC) did not meet the 30 day TSS, 7 day TSS, 30 day BOD, 7 day BOD and TSS or BOD Percent Removal.

Compromised solids handling equipment is contributing to the exceedances. MFWQTC continues to employ additional solids processing methods: dewatered cake and an outside vendor to assist with solids handling in addition to purchasing additional Liquid Oxygen in an effort to meet permit requirements.

Two extended power outages on January 11, 2018 negatively impacted the treatment process contributing to the permit exceedances.

Should you have any questions, please contact me at (502) 540-6793.

Sincerely,

Alex E. Novak, P.E.
Treatment Facilities Director

DMR Copy of Record

| | | | | | |
|--------------------|-------------------------|--------------------|--|--------------------|---|
| Permit | | | | | |
| Permit #: | KY0022411 | Permittee: | Morris Forman WQTC MSD | Facility: | MORRIS FORMAN WQTC MSD |
| Major: | Yes | Permittee Address: | 700 W Liberty St Louisville, KY 40203 | Facility Location: | 4522 ALGONQUIN PKWY LOUISVILLE, KY 40211 |
| Permitted Feature: | 001 External Outfall | Discharge: | 001-1 MUNICIPAL DISCHARGE | | |

| | | | | | |
|----------------------------------|---------------------------|---------------|----------|---------|------------------|
| Report Dates & Status | | | | | |
| Monitoring Period: | From 01/01/18 to 01/31/18 | DMR Due Date: | 02/28/18 | Status: | NetDMR Validated |

Considerations for Form Completion
 G - INFLUENTE - SECONDARY EFFLUENT1 - FINAL EFFLUENT - Parameter 74055 - Use Season 1 for summer months (May, June, July, August, September, and October) and Season 2 for winter months (November, December, January, February March, and April); enter NODI=9 for the Season not needed.

| | | | | | |
|------------------------------------|---------|--------|--------------------|------------|--------------|
| Principal Executive Officer | | | | | |
| First Name: | James | Title: | Executive Director | Telephone: | 502-540-6000 |
| Last Name: | Parrott | | | | |

No Data Indicator (NODI)
 Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | | | # of Ex. | Frequency of Analysis | Sample Type | | |
|---------|--|---|----------|-------------|---------------------|---------|----------------|---------|------------------|--------------------------|-----------|-------------|---------------|----------------|------------------|-----------------------|--------------------|---------------|-------------|
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | | | | Value 3 | Units |
| 00300 | Oxygen, dissolved [DO] | 1 - Effluent Gross | 0 | -- | Sample | = | 4.1 | | | | = | 19 - mg/L | | | | 0 | 01/01 - Daily | GR - GRAB | |
| | | | | | Permit Req. | >= | 2 INST MIN | | | | | 19 - mg/L | | | | 0 | 01/01 - Daily | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| X 00310 | BOD, 5-day, 20 deg. C | E - Secondary/Biological Process Complete | 0 | -- | Sample | = | 64564 | = | 89987 | 26 - lb/d | = | 81 | = | 122 | 19 - mg/L | | 01/01 - Daily | CP - COMPOS | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon MX WK AV | 26 - lb/d | | <= | 30 MO AVG | <= | 45 MX WK AV | 19 - mg/L | 2 | 01/01 - Daily | CP - COMPOS |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| 00310 | BOD, 5-day, 20 deg. C | G - Raw Sewage Influent | 0 | -- | Sample | = | 263446 | = | 289741 | 26 - lb/d | = | 354 | = | 430 | 19 - mg/L | | 01/01 - Daily | CP - COMPOS | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon MX WK AV | 26 - lb/d | | | | Req Mon MO AVG | Req Mon MX WK AV | 19 - mg/L | 0 | 01/01 - Daily | CP - COMPOS |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| 00400 | pH | 1 - Effluent Gross | 0 | -- | Sample | = | 6.3 | | | | = | 6.9 | | 12 - SU | | | 01/01 - Daily | GR - GRAB | |
| | | | | | Permit Req. | >= | 6 MINIMUM | | | | | <= | 9 MAXIMUM | 12 - SU | | 0 | 01/01 - Daily | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| X 00530 | Solids, total suspended | E - Secondary/Biological Process Complete | 0 | -- | Sample | = | 107140 | = | 169777 | 26 - lb/d | = | 136 | = | 231 | 19 - mg/L | | 01/01 - Daily | CP - COMPOS | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon MX WK AV | 26 - lb/d | | <= | 30 MO AVG | <= | 45 MX WK AV | 19 - mg/L | 2 | 01/01 - Daily | CP - COMPOS |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| 00530 | Solids, total suspended | G - Raw Sewage Influent | 0 | -- | Sample | = | 312415 | = | 408817 | 26 - lb/d | = | 408 | = | 479 | 19 - mg/L | | 01/01 - Daily | CP - COMPOS | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon MX WK AV | 26 - lb/d | | | | Req Mon MO AVG | Req Mon MX WK AV | 19 - mg/L | 0 | 01/01 - Daily | CP - COMPOS |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | E - Secondary/Biological Process Complete | 0 | -- | Sample | = | 7546 | = | 8761 | 26 - lb/d | = | 10.3 | = | 13.8 | 19 - mg/L | | 01/01 - Daily | CP - COMPOS | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon MX WK AV | 26 - lb/d | | <= | 20 MO AVG | <= | 30 MX WK AV | 19 - mg/L | 0 | 01/01 - Daily | CP - COMPOS |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | G - Raw Sewage Influent | 0 | -- | Sample | = | 7677 | = | 8211 | 26 - lb/d | = | 10.3 | = | 12.9 | 19 - mg/L | | 01/01 - Daily | CP - COMPOS | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon MX WK AV | 26 - lb/d | | | | Req Mon MO AVG | Req Mon MX WK AV | 19 - mg/L | 0 | 01/01 - Daily | CP - COMPOS |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| 50050 | Flow, in conduit or thru treatment plant | E - Secondary/Biological Process Complete | 0 | -- | Sample | = | 89.96 | = | 147.2 | 03 - MGD | | | | | | | 99/99 - Continuous | CN - CONTIN | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon DAILY MX | 03 - MGD | | | | | | | 99/99 - Continuous | CN - CONTIN | |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| 50060 | Chlorine, total residual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | < | 0.016 | 19 - mg/L | | 01/01 - Daily | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | | <= | 0.019 DAILY MX | 19 - mg/L | 0 | 01/01 - Daily | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| 74055 | Coliform, fecal general | 1 - Effluent Gross | 2 | -- | Sample | | | | | | | = | 263 | = | 730 | 13 - #/100mL | | 01/01 - Daily | GR - GRAB |
| | | | | | Permit Req. | | | | | | | <= | 1000 30DA GEO | <= | 2000 7 DA GEO | 13 - #/100mL | 0 | 01/01 - Daily | GR - GRAB |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| X 81010 | BOD, 5-day, percent removal | K - Percent Removal | 0 | -- | Sample | | | | | = | 77 | | | | 23 - % | | 01/30 - Monthly | CA - CALCTD | |
| | | | | | Permit Req. | | | | | >= | 85 MO MIN | | | | 23 - % | 1 | 01/30 - Monthly | CA - CALCTD | |
| | | | | | Value NODI | | | | | | | | | | | | | | |
| X 81011 | Solids, suspended percent removal | K - Percent Removal | 0 | -- | Sample | | | | | = | 67 | | | | 23 - % | | 01/30 - Monthly | CA - CALCTD | |
| | | | | | Permit Req. | | | | | >= | 85 MO MIN | | | | 23 - % | 1 | 01/30 - Monthly | CA - CALCTD | |
| | | | | | Value NODI | | | | | | | | | | | | | | |

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

| Edit Check Errors | | | | | | |
|--------------------------|----------------|---------------------|-------|------|-------------|-------------|
| Code | Parameter Name | Monitoring Location | Field | Type | Description | Acknowledge |

| | | | | | | |
|-------|-----------------------------------|---|---|------|--|-----|
| 81010 | BOD, 5-day, percent removal | K - Percent Removal | Quality or Concentration Sample Value 1 | Soft | The provided sample value is outside the permit limit. (Error Code: 1) | Yes |
| 00530 | Solids, total suspended | E - Secondary/Biological Process Complete | Quality or Concentration Sample Value 2 | Soft | The provided sample value is outside the permit limit. (Error Code: 1) | Yes |
| 00530 | Solids, total suspended | E - Secondary/Biological Process Complete | Quality or Concentration Sample Value 3 | Soft | The provided sample value is outside the permit limit. (Error Code: 1) | Yes |
| 00310 | BOD, 5-day, 20 deg. C | E - Secondary/Biological Process Complete | Quality or Concentration Sample Value 2 | Soft | The provided sample value is outside the permit limit. (Error Code: 1) | Yes |
| 00310 | BOD, 5-day, 20 deg. C | E - Secondary/Biological Process Complete | Quality or Concentration Sample Value 3 | Soft | The provided sample value is outside the permit limit. (Error Code: 1) | Yes |
| 81011 | Solids, suspended percent removal | K - Percent Removal | Quality or Concentration Sample Value 1 | Soft | The provided sample value is outside the permit limit. (Error Code: 1) | Yes |

Comments

Attachments

| Name | Type | Size |
|-------------------------------|------|--------|
| MFWQTCMOR012018.pdf | pdf | 149919 |
| 201801MFWQTOverflowReport.pdf | pdf | 96889 |
| MFWQTCoverletter012018.pdf | pdf | 42589 |

Report Last Saved By

Morris Forman WQTC MSD

User: kessel@louisvillemsd.org
 Name: John Kessel
 E-Mail: kessel@louisvillemsd.org
 Date/Time: 2018-02-21 08:53 (Time Zone: -05:00)

Report Last Signed By

User: kessel@louisvillemsd.org
 Name: John Kessel
 E-Mail: kessel@louisvillemsd.org
 Date/Time: 2018-02-21 08:56 (Time Zone: -05:00)

DMR Copy of Record

| | | | |
|--------------------|-------------------------|--------------------|---|
| Permit | | | |
| Permit #: | KY0022411 | Permittee: | Morris Forman WQTC MSD |
| Major: | Yes | Permittee Address: | 700 W Liberty St Louisville, KY 40203 |
| Permitted Feature: | 001 External Outfall | Discharge: | 001-B SECONDARY BYPASS |
| Facility: | | Facility Location: | MORRIS FORMAN WQTC MSD 4522 ALGONQUIN PKWY LOUISVILLE, KY 40211 |

| | | | |
|----------------------------------|---------------------------|---------------|----------|
| Report Dates & Status | | | |
| Monitoring Period: | From 01/01/18 to 01/31/18 | DMR Due Date: | 02/28/18 |
| Status: | NetDMR Validated | | |

Considerations for Form Completion
 MONITORING DURING PERIODS OF SECONDARY BYPASS IN ADDITION TO REGULAR MONITORING.1 - FINAL EFFLUENTF - SECONDARY BYPASS AFTER PRIMARYTREATMENT.

| | | | |
|------------------------------------|---------|------------|--------------------|
| Principal Executive Officer | | | |
| First Name: | James | Title: | Executive Director |
| Last Name: | Parrott | Telephone: | 502-540-6000 |

No Data Indicator (NODI)
 Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | | | # of Ex. | Frequency of Analysis | Sample Type |
|-------|--|--|----------|-------------|---------------------|---------|----------------|---------|------------------|--------------------------|---------|-------------|---------|-------------|---|---|----------------------------|
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | | | |
| 00310 | BOD, 5-day, 20 deg. C | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 185 | = | 300 | 19 - mg/L | 01/09 - Once Every 9 Days WH/DS - When Discharging | CP - COMPOS CP - COMPOS |
| | | | | | Permit Req. | | | | | | | | | | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | | | |
| 00310 | BOD, 5-day, 20 deg. C | F - Primary/Preliminary Process Complete | 0 | -- | Sample | | | | | | = | 258 | = | 338 | 19 - mg/L | 01/09 - Once Every 9 Days WH/DS - When Discharging | CP - COMPOS CP - COMPOS |
| | | | | | Permit Req. | | | | | | | | | | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | | | |
| 00530 | Solids, total suspended | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 263 | = | 338 | 19 - mg/L | 01/09 - Once Every 9 Days WH/DS - When Discharging | CP - COMPOS CP - COMPOS |
| | | | | | Permit Req. | | | | | | | | | | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | | | |
| 00530 | Solids, total suspended | F - Primary/Preliminary Process Complete | 0 | -- | Sample | | | | | | = | 278 | = | 423 | 19 - mg/L | 01/01 - Daily WH/DS - When Discharging | CP - COMPOS CP - COMPOS |
| | | | | | Permit Req. | | | | | | | | | | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | = | 9.2 | = | 9.5 | 19 - mg/L | 01/09 - Once Every 9 Days WH/DS - When Discharging | CP - COMPOS CP - COMPOS |
| | | | | | Permit Req. | | | | | | | | | | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | | | |
| 00610 | Nitrogen, ammonia total [as N] | F - Primary/Preliminary Process Complete | 0 | -- | Sample | | | | | | = | 12.5 | = | 14.6 | 19 - mg/L | 01/09 - Once Every 9 Days WH/DS - When Discharging | CP - COMPOS CP - COMPOS |
| | | | | | Permit Req. | | | | | | | | | | 19 - mg/L | | |
| | | | | | Value NODI | | | | | | | | | | | | |
| 50050 | Flow, in conduit or thru treatment plant | F - Primary/Preliminary Process Complete | 0 | -- | Sample | = | 10.97 | = | 23.7 | 03 - MGD | | | | | 01/09 - Once Every 9 Days WH/DS - When Discharging | CN - CONTIN CN - CONTIN | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon MX WK AV | 03 - MGD | | | | | | | |
| | | | | | Value NODI | | | | | | | | | | | | |

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments

Attachments
 No attachments.

Report Last Saved By
Morris Forman WQTC MSD

User: kessel@louisvillemsd.org
 Name: John Kessel
 E-Mail: kessel@louisvillemsd.org
 Date/Time: 2018-02-21 08:55 (Time Zone: -05:00)

Report Last Signed By

User: kessel@louisvillemsd.org
 Name: John Kessel
 E-Mail: kessel@louisvillemsd.org
 Date/Time: 2018-02-21 08:56 (Time Zone: -05:00)

Format: Month/Day/Year
 Enter Start Date : 1/1/18

MORRIS FORMAN WATER QUALITY TREATMENT CENTER JEFFERSON COUNTY, KENTUCKY MONTH OF January-18
 KPDES PERMIT NO. KY0022411 PLANT CAPACITY - 120 MGD RECEIVING STREAM-OHIO RIVER

| DATE | WASTEWATER FLOWS (Million Gallons) | | | TEMP (DEGF) | | pH | | SETS (ML) | | TSS (mg/L) | | D.O. (mg/L) | 5-DAY BOD (mg/L) | | | RETURN SLUDGE | | | AERATION BASIN | | | | | ACTIVE Sludge Wasted | Primary Sludge | CHLORINATION | | | FINAL EFFLUENT | |
|---------|---------------------------------------|----------|--------|----------------|-------|-----|-------|--------------|-------|---------------|-------|----------------|---------------------|-------|-------|---------------|------------|-------------|----------------|-------------|--------------|-----|---------|----------------------------|-------------------|----------------|---------------|-------------------------------|-------------------|----------------|
| | Effluent | Effluent | Bypass | raw | final | raw | final | raw | final | raw | final | final | raw | final | final | FLOW MG | TSS g/L | TVSS g/L | D.O. mg/L | MLSS g/L | MLVSS g/L | SET | SVI | MG | MG | Dosage KLBS | Resid mg/L | Fecal Coliform #/100 ml | NH3-N mg/L | Pump. Hours |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1/1/18 | 76.34 | 76.34 | 0.00 | 50 | 50 | 7.1 | 6.7 | 17.0 | 0.8 | 250 | 40 | 10.3 | 142 | 75 | 38 | 27.2 | 12.5 | 11.1 | 18.3 | 2.7 | 2.6 | 288 | found. | 1.11 | 0.27 | 1.65 | 0.016 | 200 | 17 | 0.0 |
| 1/2/18 | 78.31 | 78.31 | 0.00 | 51 | 51 | 7.3 | 6.8 | 12.0 | 0.1 | 268 | 15 | 9.8 | 484 | 220 | 15 | 27.2 | 11.4 | 9.5 | 19.4 | 2.8 | 2.2 | 314 | found. | 1.07 | 0.36 | 1.14 | 0.016 | 41 | 17 | 0.0 |
| 1/3/18 | 82.22 | 82.22 | 0.00 | 54 | 54 | 6.8 | 6.7 | 17.0 | 0.1 | 423 | 22 | 9.0 | 476 | 429 | 30 | 27.2 | 11.4 | 9.5 | 7.5 | 2.8 | 2.4 | 241 | found. | 1.10 | 0.49 | 1.83 | 0.016 | 50 | 14 | 0.0 |
| 1/4/18 | 77.18 | 77.18 | 0.00 | 48 | 48 | 7.1 | 6.6 | 15.0 | 0.1 | 412 | 21 | 5.9 | 408 | 295 | 14 | 27.2 | 12.7 | 11.2 | 10.6 | 3.8 | 3.3 | 334 | found. | 1.11 | 0.43 | 1.98 | 0.016 | 88 | 10 | 0.0 |
| 1/5/18 | 73.74 | 73.74 | 0.00 | 50 | 50 | 7.2 | 6.5 | 17.1 | 0.1 | 440 | 18 | 5.7 | 600 | 351 | 17 | 27.2 | 13.2 | 11.5 | 11.1 | 4.0 | 3.3 | 350 | found. | 1.12 | 0.39 | 1.64 | 0.016 | 116 | 14 | 0.0 |
| 1/6/18 | 67.78 | 67.78 | 0.00 | 53 | 53 | 7.2 | 6.7 | 10.9 | 0.3 | 460 | 63 | 7.7 | 447 | 301 | 43 | 27.2 | 13.7 | 12.1 | 16.4 | 4.0 | 3.5 | 301 | found. | 1.02 | 0.24 | 1.84 | 0.016 | 140 | 12 | 0.0 |
| 1/7/18 | 75.69 | 75.69 | 0.00 | 58 | 58 | 7.2 | 6.6 | 13.0 | 3.0 | 290 | 152 | 6.3 | 261 | 242 | 86 | 27.2 | 13.2 | 11.7 | 18.1 | 7.1 | 6.2 | 322 | found. | 0.89 | 0.28 | 2.11 | 0.016 | 116 | 13 | 0.0 |
| 1/8/18 | 105.42 | 102.01 | 3.41 | 57 | 57 | 7.0 | 6.6 | 15.0 | 8.0 | 493 | 202 | 7.0 | 258 | 200 | 123 | 27.2 | 14.6 | 12.8 | 20.8 | 3.3 | 2.9 | 263 | found. | 1.05 | 0.40 | 2.94 | 0.016 | 1050 | 13 | 0.0 |
| 1/9/18 | 83.66 | 83.66 | 0.00 | 58 | 58 | 7.0 | 6.6 | 15.0 | 0.2 | 472 | 51 | 7.4 | 360 | 231 | 27 | 27.2 | 14.9 | 12.7 | 19.8 | 3.3 | 2.8 | 258 | found. | 1.15 | 0.38 | 1.66 | 0.016 | 94 | 12 | 0.0 |
| 1/10/18 | 82.67 | 82.67 | 0.00 | 59 | 59 | 7.0 | 6.5 | 20.0 | 0.1 | 524 | 34 | 6.8 | 480 | 245 | 22 | 27.2 | 16.5 | 14.5 | 14.7 | 4.3 | 3.9 | 282 | found. | 1.16 | 0.38 | 1.77 | 0.016 | 74 | 16 | 0.0 |
| 1/11/18 | 82.67 | 82.67 | 0.00 | 60 | 60 | 7.7 | 6.5 | 12.1 | 1.0 | 368 | 90 | 6.9 | 270 | 338 | 96 | 27.2 | 16.9 | 14.5 | 14.3 | 3.3 | 2.8 | 310 | found. | 0.41 | 0.28 | 0.77 | 0.016 | 46 | 13 | 0.0 |
| 1/12/18 | 213.08 | 147.20 | 65.88 | 57 | 57 | 7.2 | 6.6 | 7.0 | 6.0 | 270 | 240 | 4.1 | 196 | 165 | 159 | 27.2 | 14.5 | 12.4 | 18.3 | 4.3 | 3.7 | 258 | found. | 0.71 | 0.12 | 5.72 | 0.016 | 1540 | 9 | 0.0 |
| 1/13/18 | 124.85 | 112.05 | 12.80 | 48 | 48 | 7.2 | 6.9 | 11.0 | 1.4 | 288 | 122 | 7.5 | 258 | 226 | 59 | 27.2 | 17.7 | 15.2 | 11.4 | 3.6 | 3.4 | 214 | found. | 1.12 | 0.29 | 4.29 | 0.016 | 123 | 5 | 9.3 |
| 1/14/18 | 82.43 | 82.43 | 0.00 | 55 | 55 | 7.2 | 6.6 | 14.1 | 0.1 | 334 | 44 | 7.9 | 321 | 218 | 36 | 27.2 | 15.6 | 13.4 | 19.2 | 2.7 | 2.4 | 230 | found. | 1.12 | 0.44 | 2.13 | 0.016 | 156 | 4 | 24.0 |
| 1/15/18 | 89.58 | 89.58 | 0.00 | 51 | 51 | 7.0 | 6.5 | 14.0 | 0.1 | 300 | 51 | 7.2 | 402 | 216 | 40 | 27.2 | 16.2 | 14.0 | 19.4 | 3.7 | 3.2 | 277 | found. | 1.06 | 0.41 | 1.83 | 0.016 | 116 | 9 | 24.0 |
| 1/16/18 | 81.78 | 81.78 | 0.00 | 47 | 47 | 6.8 | 6.5 | 13.0 | 0.1 | 392 | 48 | 6.1 | 341 | 312 | 44 | 27.2 | 16.9 | 14.5 | 17.5 | 3.8 | 3.3 | 303 | found. | 1.13 | 0.30 | 1.86 | 0.016 | 204 | 11 | 24.0 |
| 1/17/18 | 72.97 | 72.97 | 0.00 | 49 | 49 | 7.1 | 6.6 | 20.0 | 0.3 | 524 | 62 | 6.8 | 532 | 339 | 43 | 27.2 | 16.4 | 14.1 | 14.6 | 4.1 | 3.6 | 292 | found. | 1.08 | 0.38 | 1.99 | 0.016 | 262 | 9 | 24.0 |
| 1/18/18 | 67.40 | 67.40 | 0.00 | 49 | 49 | 6.5 | 6.5 | 17.0 | 0.4 | 450 | 74 | 6.4 | 509 | 381 | 44 | 27.2 | 16.8 | 14.6 | 10.6 | 4.6 | 4.0 | 336 | found. | 1.08 | 0.33 | 1.92 | 0.016 | 120 | 8 | 24.0 |
| 1/19/18 | 76.68 | 76.68 | 0.00 | 53 | 53 | 7.0 | 6.5 | 24.0 | 5.0 | 648 | 223 | 6.1 | 530 | 516 | 157 | 27.2 | 17.1 | 14.9 | 4.5 | 5.1 | 5.0 | 378 | found. | 1.13 | 0.19 | 2.93 | 0.016 | 92 | 9 | 24.0 |
| 1/20/18 | 94.09 | 93.18 | 0.91 | 58 | 58 | 7.0 | 6.4 | 22.9 | 34.2 | 550 | 390 | 5.2 | 378 | 398 | 374 | 27.2 | 18.3 | 16.2 | 9.0 | 3.7 | 3.3 | 311 | found. | 1.15 | 0.04 | 5.11 | 0.016 | 920 | 10 | 11.3 |
| 1/21/18 | 94.50 | 93.74 | 0.76 | 58 | 58 | 7.1 | 6.4 | 15.0 | 10.0 | 404 | 282 | 6.7 | 317 | 278 | 225 | 27.2 | 18.2 | 15.8 | 12.2 | 3.5 | 3.1 | 276 | found. | 1.14 | 0.18 | 4.53 | 0.016 | 494 | 9 | 0.0 |
| 1/22/18 | 111.13 | 105.15 | 5.98 | 58 | 58 | 6.9 | 6.5 | 20.0 | 15.0 | 970 | 447 | 5.5 | 303 | 368 | 281 | 27.2 | 18.4 | 15.9 | 10.3 | 4.3 | 3.7 | 258 | found. | 1.12 | 0.28 | 4.49 | 0.016 | 270 | 9 | 0.0 |
| 1/23/18 | 91.80 | 91.75 | 0.05 | 56 | 56 | 7.1 | 6.3 | 15.0 | 14.0 | 411 | 320 | 5.1 | 324 | 251 | 224 | 27.2 | 17.9 | 15.5 | 13.6 | 3.9 | 3.4 | 284 | found. | 1.13 | 0.40 | 4.12 | 0.016 | 4200 | 8 | 0.0 |
| 1/24/18 | 96.08 | 96.08 | 0.00 | 55 | 55 | 7.2 | 6.5 | 14.0 | 0.6 | 328 | 102 | 6.2 | 358 | 175 | 80 | 27.2 | 17.7 | 15.4 | 10.0 | 3.9 | 3.5 | 283 | found. | 1.14 | 0.42 | 3.38 | 0.016 | 490 | 10 | 0.0 |
| 1/25/18 | 91.07 | 91.07 | 0.00 | 58 | 58 | 7.2 | 6.5 | 14.0 | 0.3 | 483 | 74 | 5.8 | 330 | 270 | 54 | 27.2 | 11.9 | 10.4 | 7.9 | 4.5 | 4.1 | 308 | found. | 1.16 | 0.36 | 3.00 | 0.016 | 1000 | 11 | 0.0 |
| 1/26/18 | 92.32 | 92.32 | 0.00 | 57 | 57 | 7.2 | 6.7 | 11.2 | 0.5 | 372 | 89 | 4.9 | 283 | 261 | 75 | 27.2 | 17.5 | 15.2 | 7.9 | 4.1 | 3.5 | 299 | found. | 1.15 | 0.41 | 2.76 | 0.016 | 638 | 12 | 0.0 |
| 1/27/18 | 114.23 | 96.42 | 17.81 | 58 | 58 | 6.9 | 6.4 | 13.2 | 4.8 | 488 | 246 | 5.4 | 312 | 272 | 149 | 27.2 | 17.1 | 14.9 | 6.6 | 4.1 | 3.7 | 271 | found. | 1.14 | 0.35 | 4.24 | 0.016 | 338 | 10 | 0.0 |
| 1/28/18 | 105.32 | 105.32 | 0.00 | 58 | 58 | 7.2 | 6.5 | 11.0 | 2.0 | 304 | 140 | 7.9 | 160 | 130 | 88 | 27.2 | 16.8 | 14.6 | 16.3 | 3.9 | 3.4 | 223 | found. | 1.10 | 0.36 | 3.31 | 0.016 | 920 | 6 | 0.0 |
| 1/29/18 | 112.65 | 110.50 | 2.15 | 57 | 57 | 6.8 | 6.7 | 15.0 | 1.5 | 277 | 115 | 5.5 | 280 | 168 | 71 | 27.2 | 16.8 | 14.4 | 10.3 | 2.9 | 2.5 | 247 | found. | 1.13 | 0.35 | 2.56 | 0.016 | 360 | 9 | 0.0 |
| 1/30/18 | 102.30 | 102.30 | 0.00 | 54 | 54 | 7.3 | 6.7 | 15.0 | 2.0 | 320 | 143 | 5.7 | 370 | 220 | 82 | 27.2 | 15.7 | 13.7 | 10.4 | 3.2 | 2.9 | 254 | found. | 1.16 | 0.27 | 2.70 | 0.016 | 1200 | 12 | 0.0 |
| 1/31/18 | 105.93 | 105.93 | 0.00 | 56 | 56 | 7.1 | 6.8 | 2.5 | 0.5 | 131 | 106 | 5.1 | 297 | 312 | 69 | 27.2 | 0.0 | 0.0 | 7.0 | 0.0 | 0.0 | 254 | found. | 1.15 | 0.31 | 3.25 | 0.016 | 1000 | 10 | 0.0 |
| Sum | 2697.6 | 2587.9 | 109.8 | | | | | | | | | | | | 788.8 | | | | | | | | | 30.967 | 9.491 | | | | 164.6 | |
| Average | 93.0 | 89.2 | 12.2 | 54.5 | 54.5 | 7.1 | 6.6 | 15.0 | 3.8 | 420 | 130 | 6.7 | 356 | 271 | 94 | 27.2 | 15.6 | 13.5 | 13.5 | 3.9 | 3.4 | 287 | #DIV/0! | 1.07 | 0.33 | 2.74 | 0.016 | 238 | 11 | |

SEWER CONNECTIONS

147634 TIMES 4 =

590536 SEWER POPULATION

IND. WASTER POPULATION EQ

CUSTOMERS 376

FLOW 295388

BOD 1033460

TSS 962728

Authorized Agent

Certification No. 26893

MORRIS FORMAN WASTEWATER TREATMENT PLANT

JEFFERSON COUNTY, KY

Month of Jan-18

Average Flow

| SETTLING TANKS | Primary | Secondary | | |
|------------------------------|----------|-----------|-----------|-----------|
| | | Battery A | Battery B | Battery C |
| Average Flow (MGD) | 93.02 | 28.84 | 23.21 | 6.44 |
| Tanks in Service | 4.00 | 6.1 | 7.1 | 3.9 |
| Surface Area (Ft.2) | 77000.00 | 52856.96 | 61001.09 | 34108.13 |
| Volume (MG) | 8.33 | 5.41 | 6.25 | 3.49 |
| Weir Length (Ft.) | 2860.00 | 2190.66 | 2528.20 | 1413.61 |
| Avg. Weir Overflow (GPD/Ft) | 32525.20 | 13164.05 | 9178.60 | 4557.77 |
| Avg. Settling Rate (GPD/Ft2) | 1208.08 | 753.69 | 571.40 | 377.48 |
| Avg. Detention Time | 2.15 | 4.51 | 6.46 | 13.01 |

AERATION TANKS

| | Battery A | Battery B | Battery C |
|-----------------------------|-----------|-----------|-----------|
| Volume (Gallons) | 4200000 | 4200000 | 2100000 |
| Avg. Flow (MGD) | 39.84 | 34.86 | 12.88 |
| Avg. Detention Time (Hours) | 3.50 | 4.34 | 7.82 |

CHLORINE CONTACT CHAMBERS

| | |
|-----------------------------|---------|
| Contact Chambers in Use | 2.0 |
| Volume (Gallons) | 2340000 |
| Avg. Detention Time (Hours) | 0.97 |

Remarks: BY-PASS REPORTS (See Attached)



Report Selections: Period: 01/01/2018 00:00 thru 01/31/2018 23:59, Excluding PPI Excluding CSO Excluding LAT, Result: WUS, Act Code: DISDW, DISREV, DISSUS

| KPDES # | Facility ID | Water Quality Treatment Center | Receiving Stream of Treatment Center | Region |
|-----------|-------------|--------------------------------|--------------------------------------|--------|
| KY0022411 | MSD0278 | MORRIS FORMAN | OHIO RIVER | WEST |

| Facility Type | Facility ID | Facility Address | If Pump Station, Name of Pump Station: | Receiving Stream | Discharge to |
|---------------------------|-------------|--------------------|--|------------------|--------------|
| SPL Sewer Treatment Plant | MSD0278 | 4522 ALGONQUIN PKY | | OHIO RIVER | STREAM |

| Activity Code / Description | WO # | Ref No | Initiated | Initiated By | Assigned To | Disch Status | Event Date | Problem | Result | Completed | Condition |
|--------------------------------|---------|--------|------------|--------------|-------------|---------------------------|------------|----------------|---------------------------------|-------------------|-----------|
| : DISREV: RAIN EVENT DISCHARGE | 2855275 | | 01/22/2018 | BURCH | BURCH | REPAIRED - ISSUE RESOLVED | 01/22/2018 | BYPASS AT WQTC | UNAUTHORIZED DISCHARGE - WATERS | 01/22/18 10:58 AM | |

Discharge Reporting:

| | |
|----------------------|---|
| Discharge Amount: | 1,210,000 GAL |
| Cause: | STRUCTURAL FAILURE |
| Clean Up: | MSD PERSONNEL CLEANED |
| Control Zone: | PLACED BARRICADES AROUND THE IMPACTED AREA |
| Impact: | NO VISUAL IMPACT OBSERVED |
| Repair: | CONTRACTORS REPAIRED LEAKING SODIUM HYPOCHLORITE LINE |
| Public Notification: | FIRE DEPT, HEALTH DEPT AND IWD NOTIFIED |

Notifications:

| | | |
|------------------|--------|---|
| 12/24/17 1:00 am | DISNOT | EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE SENT TO 'DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV' |
| 12/24/17 1:00 am | DISSNO | SUPPLEMENTAL EMAIL NOTIFICATION OF UNAUTHORIZED DISCHARGE HAS BEEN SENT TO 'DISCHARGENOTICES@LOUISVILLEMSD.ORG, SAYRE.DENNIS@EPAMAIL.EPA.GOV' |

Total Facilities Printed: 1

Total Work Orders Printed: 1